



Discovery of *Anergates atratulus* by H. St. JK Donisthorpe and WC Crawley on July 23, 1912

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General Note

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Anergates is a monotypic genus of myrmicine ants consisting of the single species. It is a worker-less obligate parasite to *Tetramorium caespitum*, the "lawn ant" or "pavement ant", and is thought to have evolved as an aberrant form of the genus *Tetramorium*. It is distributed in Eurosiberia and eastern parts of North America. It was first discovered in UK by H. St. J. K. Donisthorpe and W. C. Crawley on July 23rd, 1912 in the New Forest. *Anergates* is never known to coexist with the host colony's fertile queen, every *Anergates-Tetramorium* colony is doomed to survive only the lifespan of the youngest *Tetramorium* workers. Thus, the parasitic queen has very limited scope for producing alates to secure the next generation, as this time span is often only 2-3 years or fewer. As a result, even within its well-established range, *Anergates* is very scarce, with only a tiny proportion of *Tetramorium* colonies playing host to this parasite. The scientific name of this species, *Anergates*, derives from the Greek words meaning 'no' and 'workers', referring to the fact that, unlike most other ant species, there are no worker ants (wingless, sterile females). Instead there are just males and gynes (females destined to become queens).

Anergates atratulus not only takes over the nest of another ant species, but also enslaves its workers. Male dark guest ants are cream to yellow in colour and similar to pupae in appearance, being wingless and barely able to walk. Queen dark guest ants are tiny and winged and normally have an abdomen greatly swollen with eggs when found in the host nest. Both the queen and the male dark guest ant are greatly reduced in size in comparison to non-parasitic ant species. The *Tetramorium caespitum* workers now forage for food for the new queen and her brood as if they were their own. These workers are predators and scavengers of animal and plant material, in particular seeds. As the male dark guest ants are wingless, pupa-like and unable to leave the nest to find unrelated females, they mate with their female siblings in the nest. After mating, the females fly out of the nest in search of a new *Tetramorium caespitum* nest to invade. The dark guest ant is found in grassland, heathland, and rocky and coastal areas. It generally prefers habitats with sparse vegetation cover and short, dry, acidic turf.